ABSTRACT

The present invention provides a method for the qualitative detection of viral or bacterial antibodies from animal body fluid, and an apparatus for performing the same. The apparatus according to one aspect includes a piezoelectric crystal, which is operated by an oscillation circuit, and the resonant frequency is measurement by using a universal counter. According to another aspect, the recombinant viral or bacterial protein is immobilized on the surface of the said Pz crystal and acts as an antigen. In one embodiment, the presence or absence of viral or bacterial specific antibody may be determined using the fabricated Pz sensor by monitoring the frequency change signal. In another embodiment, the present method is proved to be inexpensive, simple, and rapid.